



Tab 10

Report on High School Graduates Performance

Coordinating Board for Higher Education

March 3, 2021

BACKGROUND

The Coordinating Board for Higher Education's Missouri Report on High School Graduates Performance tracks Missouri's public high school graduates entering the state's public two- and four-year degree-granting postsecondary institutions as first-time full-time degree-seeking undergraduate students in the fall semester following their high school graduation. The annual report, which was first issued in 1996, provides information to secondary and postsecondary stakeholders regarding student preparation, persistence, and completion.

The law that authorizes the CBHE to prepare the annual report (§ 173.750, RSMo) describes the report's contents, which must include "grade point averages after the initial college year...; the percentage of students returning to college after the first and second half of the initial college year, or after each trimester of the initial college year; the percentage of students taking noncollege level classes in basic academic courses during the first college year, or remedial courses in basic academic subjects of English, mathematics, or reading; and other such data as determined by rule and regulation of the coordinating board for higher education."

CURRENT STATUS

Overall postsecondary enrollment was almost certainly impacted by the COVID-19 pandemic, although total high school graduates in Missouri were also projected to decline. Total enrollment of recent high school graduates declined 6.3 percent from fall 2019 to 2020, which was similar to declines in overall FAFSA filing and total headcount at public colleges and universities. Total enrollment in remediation declined from 19.8 percent to 17.3 percent.

Fall-to-fall persistence has been generally stable in recent years. 52.1 percent of incoming students in fall 2014 had earned a degree from a public two- or four-year institution by spring 2020. This is an increase over 2013, and tracks with broader increases in graduation rates across the state.

Enrollment and Preparation

This year's report provides data about postsecondary enrollment and preparation of the public high school graduating class of 2020.

The total number of public high school graduates in Missouri continues to decline, and the COVID-19 pandemic also certainly impacted enrollment in fall 2020. Total enrollment of same-year Missouri public high school graduates in Missouri public institutions decreased by 6.3 percent from 20,847 first-time full-time degree-seeking undergraduates in 2019 to 19,528 in 2020. 9,377 students (48.0 percent) attended two-year institutions, and 10,151 students (52.0 percent) attended four-year institutions. Enrollment of first-time full-time degree-seeking undergraduates in this cohort decreased by 4.8 percent at public two-year institutions from the previous year and decreased at public four-year institutions by 7.3 percent. Detailed summary tables are included in the attachment to this item.

The Department of Higher Education and Workforce Development continues to work with postsecondary institutions to encourage the development of multiple math pathways and multiple measures for course placement, ensuring that only students who really need it are placed in remediation. The department also analyzed the impact of corequisite supports—remedial education supports designed to be taken at the same time as the college-level gateway course—in the 2020 Annual Report on the Condition of College and Career Readiness. While corequisite supports have proven effective, there is more work to be done, including ensuring that students are given equitable opportunities to enroll in those courses or supports. Additionally, most of the

focus has been on math corequisite supports, and the department is working for more widespread adoption of English corequisite supports.

Remedial Participation of Recent Missouri Public High School Graduates in Public Postsecondary Institutions					
	Fall 2016	Fall 2017	Fall 2018	Fall 2019	Fall 2020
Total	26.8%	22.8%	21.5%	19.8%	17.3%
Math	21.5%	17.6%	17.5%	15.9%	13.1%
English	11.4%	10.1%	8.2%	7.2%	6.5%
Reading	6.6%	6.0%	5.2%	4.4%	3.7%

Other Trends in Enrollment and Preparation

- Overall enrollment in remedial coursework has declined each year since fall 2013, and enrollment in remedial math has declined each year since fall 2012. Enrollments in remedial English/writing and reading have declined since fall 2016.
- Overall enrollment in remediation at open admissions institutions has declined from 42.2 percent in fall 2016 to 26.1 percent in fall 2020. Total and math remediation increased at moderately selective universities in 2019 and 2020, however, to 18.8 percent (total) and 12.7 percent (math) in 2020. Both are now comparable to rates in that sector in fall 2017.
- Overall remedial enrollment and enrollment in all content areas (math, English, and reading) continues to decrease among Black/African-American students and Hispanic students, although rates still exceed the overall state rates.
- Hispanic students remained steady at 5.6 percent of the total cohort, compared to 6.8 percent for Black/African-American students. 72.7 percent of the cohort were White, which was a slight increase from 71.5 percent in 2019.

Performance and Retention in College

The Report on High School Graduates Performance also tracks several measures of student success and persistence in Missouri's public postsecondary sector. This year's report provides data about performance and retention in college for the public high school graduating class of 2019. Detailed summary tables are included in the attachment to this item. Among the more significant findings for this cohort are:

- Fall-to-fall retention has been generally stable in recent years, fluctuating between 76.9 percent for the fall 2016 cohort to 76.8 percent for 2018 and 2019. Fall-to-fall retention rates ranged from 66.8 percent for Black/African-American students to 89.0 percent for Asian/Pacific Islander students, both of which were comparable to 2018.
- On average, this cohort completed 34.0 credits by the end of the spring 2020 term with a 3.05 grade point average. Asian/Pacific Islander students completed 37.7 credits with a 3.27 GPA, Black/African-American students completed 24.1 credits with a 2.57 GPA, and Whites completed 36.0 credits with a 3.14 GPA. Females completed 34.8 credits with a 3.13 GPA, compared to males, who completed 33.0 credits with a 2.95 GPA. Credits completed include dual/advanced credit completed prior to enrollment.
- Students at two-year institutions (open admissions) completed 28.0 credits through spring 2020 with a 2.85 GPA. Students at four-year institutions, including open admissions and moderately selective, selective, and highly selective institutions completed 38.8 credits through spring 2020 with a 3.21 GPA.

Degree Completion

The timely completion of a certificate or degree is an additional indication of how well prepared Missouri's high school graduates are for college-level work. Detailed tables in the attachment to this item show the six-year degree completion rate of students beginning college in the fall of 2014. The findings include:

- 52.1 percent of incoming public Missouri high school students who entered as a first-time full-time degree-seeking undergraduate in fall 2014 had earned a two- or four-year degree from a public Missouri college or university by spring 2020. This is an increase over the 2013 cohort (50.7 percent). This rate does not account for transfer to or completion from an independent or out-of-state institution.
- 38.5 percent had earned a bachelor's degree, 18.1 percent earned an associate degree, and 2.5 percent earned a graduate or professional degree within six years. All percentages equal or improve upon the fall 2013 entering cohort, which tracks with increasing graduation rates seen among the broader population. Some students earned more than one degree, and are counted here more than once.
- Racial and ethnic disparities do persist; 60.3 percent of Asian/Pacific Islanders and 55.6 percent of Whites earned a degree or certificate within six years, as did 31.9 percent of Black/African-American students and 44.1 percent of Hispanics. All groups improved slightly from the 2013 cohort except Hispanics, however (44.6 percent). Overall, women continue to graduate at a higher rate than men (54.5 percent compared to 49.1 percent).

Next Steps

DHEWD staff will continue to work across several fronts to encourage increased enrollment and persistence among recent high school graduates. This includes continued research on equity and on best practices in remedial education, including placement measures, and working with partner agencies and stakeholders.

The department has also been working with the Department of Elementary and Secondary Education to evaluate alignment between the secondary and postsecondary sectors, especially with regards to math courses, and with the Charles A. Dana Center from the University of Texas-Austin to build relationships between high schools and colleges and universities in the Kansas City/Northwest region of the state as part of a Carnegie grant. In addition, DHEWD continues outreach to support increased FAFSA filing to encourage students to become more aware of their financial aid options.

RECOMMENDATION

This is an information item only.

ATTACHMENT

- Enrollment and Preparation, Performance and Retention in College, and Degree Completion Tables

Tab 10 Attachment

Enrollment and Preparation, Performance and Retention in College, and Degree Completion Tables

Enrollment and Preparation

Table 1: Recent Public Missouri High School Graduate Enrollment by Sector, Gender, and Race/Ethnicity, 2010 to 2020													
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	10-Year % Change	1-Year % Change
Overall Enrollment	23,948	23,742	21,018	22,034	22,443	21,453	21,833	22,160	22,067	20,847	19,528	-18.5%	-6.3%
Two-Year	11,225	11,279	9,132	10,393	10,610	9,303	9,769	10,423	10,401	9,847	9,377	-16.5%	-4.8%
	46.9%	47.5%	43.4%	47.2%	47.3%	43.4%	44.7%	47.0%	47.1%	47.2%	48.0%		
Four Year	12,723	12,463	11,861	11,641	11,833	12,150	12,064	11,737	11,666	10,950	10,151	-20.2%	-7.3%
	53.1%	52.5%	56.4%	52.8%	52.7%	56.6%	55.3%	53.0%	52.9%	52.5%	52.0%		
Women	13,067	12,997	11,596	12,175	12,342	11,816	11,983	12,275	12,169	11,674	10,967	-16.1%	-6.1%
	54.6%	54.7%	55.2%	55.3%	55.0%	55.1%	54.9%	55.4%	55.1%	56.0%	56.2%		
Men	10,863	10,733	9,397	9,844	10,092	9,628	9,840	9,872	9,881	9,159	8,534	-21.4%	-6.8%
	45.4%	45.2%	44.7%	44.7%	45.0%	44.9%	45.1%	44.5%	44.8%	43.9%	43.7%		
Black / African-American	2,433	2,553	1,525	2,209	2,065	2,010	2,138	1,870	1,794	1,623	1,332	-45.3%	-17.9%
	10.2%	10.8%	7.3%	10.0%	9.2%	9.4%	9.8%	8.4%	8.1%	7.8%	6.8%		
White	18,381	18,011	14,289	17,215	17,071	16,792	17,007	16,097	15,907	14,900	14,206	-22.7%	-4.7%
	76.8%	75.9%	68.0%	78.1%	76.1%	78.3%	77.9%	72.6%	72.1%	71.5%	72.7%		
Hispanic	374	343	275	470	620	846	885	1019	1,074	1,169	1,085	190.1%	-7.2%
	1.6%	1.4%	1.3%	2.1%	2.8%	3.9%	4.1%	4.6%	4.9%	5.6%	5.6%		
Asian / Pacific Islander	408	395	333	486	537	497	489	449	456	481	452	10.8%	-6.0%
	1.7%	1.7%	1.6%	2.2%	2.4%	2.3%	2.2%	2.0%	2.1%	2.3%	2.3%		
Other	2,352	2,440	4,596	1,654	2,150	1,308	1,314	2,725	2,836	2,674	2,453	4.3%	-8.3%
	9.8%	10.3%	21.9%	7.5%	9.6%	6.1%	6.0%	12.3%	12.9%	12.8%	12.6%		

Data Source: Enhanced Missouri Student Achievement Study (EMSAS)

Table 2: Recent Missouri Public High School Graduate Enrollment in Remediation by Institutional Admissions Selectivity; 2016 to 2020

	2016	2017	2018	2019	2020
Selective	9.4%	8.8%	7.6%	6.3%	4.5%
Math	8.8%	8.3%	7.0%	5.7%	3.9%
English	1.1%	1.1%	1.2%	1.1%	0.8%
Reading	-	-	-	-	-
Mod Selective	19.7%	19.4%	12.1%	14.0%	18.8%
Math	11.7%	12.1%	10.1%	9.8%	12.7%
English	10.2%	10.3%	3.8%	6.2%	7.7%
Reading	0.5%	0.2%	-	0.5%	0.2%
Open	42.2%	33.5%	33.4%	30.7%	26.1%
Math	34.5%	25.8%	26.7%	24.7%	19.8%
English	19.2%	15.8%	14.0%	11.6%	10.1%
Reading	13.4%	11.6%	10.0%	8.4%	7.2%

Source: Enhanced Missouri Achievement Study (EMSAS)

Table 3: Recent Missouri Public High School Graduate Enrollment in Remediation by Gender; 2016 to 2020

	2016	2017	2018	2019	2020
Women	28.3%	24.5%	22.8%	21.3%	18.3%
Math	23.5%	19.5%	18.9%	17.8%	14.1%
English	11.6%	10.3%	8.2%	7.3%	6.6%
Reading	7.0%	6.4%	5.7%	4.6%	4.3%
Men	24.9%	20.7%	19.8%	17.9%	16.0%
Math	19.0%	15.1%	15.8%	13.5%	11.7%
English	11.2%	9.8%	8.1%	7.2%	6.3%
Reading	6.1%	5.4%	4.6%	4.3%	3.0%

Source: Enhanced Missouri Achievement Study (EMSAS)

**Table 4: Recent Missouri Public High School Graduate Enrollment in Remediation
by Race / Ethnicity; 2016 to 2020**

	2016	2017	2018	2019	2020
Black / African-American	52.6%	46.0%	38.2%	36.2%	28.2%
Math	43.1%	35.4%	30.8%	27.9%	20.7%
English	32.6%	28.1%	23.4%	18.2%	14.9%
Reading	23.6%	19.3%	17.1%	13.8%	8.0%
White	23.3%	18.8%	16.5%	15.2%	13.8%
Math	18.7%	14.8%	13.3%	12.0%	10.3%
English	8.5%	6.7%	6.0%	5.6%	5.4%
Reading	4.6%	3.2%	2.4%	1.9%	1.9%
Hispanic	28.5%	27.2%	30.1%	27.8%	22.7%
Math	22.4%	20.6%	24.5%	22.2%	17.5%
English	11.8%	13.1%	11.4%	10.5%	8.7%
Reading	6.0%	8.9%	8.9%	7.8%	5.4%
Asian / Pacific Islander	20.7%	14.3%	11.8%	11.6%	9.7%
Math	14.3%	10.5%	9.9%	9.4%	7.1%
English	11.5%	6.0%	5.9%	5.4%	4.7%
Reading	6.5%	4.0%	2.6%	3.1%	1.8%
Other / Unknown	31.0%	30.1%	36.9%	33.8%	30.3%
Math	25.0%	21.2%	31.3%	29.2%	24.2%
English	13.9%	16.9%	9.8%	8.3%	7.9%
Reading	6.7%	11.8%	12.3%	11.5%	11.8%

**Source: Enhanced Missouri Achievement Study
(EMSAS)**

Performance and Retention in College

**Table 5: Recent Missouri Public High School Graduate Retention
by Gender and Race/Ethnicity; Fall 2019 - Fall 2020**

	Students	Completed Fall 2019	Avg. Fall 2019 GPA	Avg. Credits Completed (Fall 2019)	Completed Spring 2020	Avg. Spring 2020 GPA	Avg. Credits Completed (Spring 2020)	Enrolled Fall 2020
Female	11,674	98.1%	2.99	22.1	88.0%	3.13	34.8	78.7%
Black / African-American	987	97.6%	2.53	13.9	82.7%	2.67	25.0	69.2%
White	8,322	98.0%	3.10	24.1	89.1%	3.22	37.0	81.2%
Hispanic	651	97.7%	2.84	19.2	86.9%	2.99	31.9	75.7%
Asian / Pacific Islander	250	99.6%	3.31	25.8	95.2%	3.41	39.4	90.8%
Other / Unknown	1,464	98.8%	2.66	17.0	84.7%	2.88	29.0	70.4%
Male	9,159	97.6%	2.79	20.4	85.4%	2.95	33.0	74.3%
Black / African-American	635	97.0%	2.24	12.7	78.7%	2.40	22.5	63.2%
White	6,565	97.3%	2.90	21.9	86.4%	3.04	34.6	77.0%
Hispanic	518	98.8%	2.57	18.5	84.6%	2.82	31.1	70.9%
Asian / Pacific Islander	231	97.4%	2.99	23.3	92.6%	3.12	35.8	87.0%
Other / Unknown	1,210	98.8%	2.53	16.9	81.8%	2.76	29.0	64.8%
Total	20,847	97.9%	2.90	21.4	86.9%	3.05	34.0	76.8%
Black / African-American	1,622	97.4%	2.42	13.4	81.1%	2.57	24.1	66.8%
White	14,900	97.7%	3.01	23.1	87.9%	3.14	36.0	79.3%
Hispanic	1,169	98.2%	2.72	18.9	85.9%	2.91	31.5	73.6%
Asian / Pacific Islander	481	98.5%	3.16	24.6	94.0%	3.27	37.7	89.0%
Other / Unknown	2,675	98.8%	2.60	17.0	83.4%	2.82	29.0	67.8%

Source: Enhanced Missouri Achievement Study (EMSAS)

**Table 6: Recent Missouri Public High School Graduate Retention
by Sector and Race/Ethnicity; Fall 2019- Fall 2020**

	Students	Completed Fall 2019	Avg. Fall 2019 GPA	Avg. Credits Completed (Fall 2019)	Completed Spring 2020	Avg. Spring 2020 GPA	Avg. Credits Completed (Spring 2020)	Enrolled Fall 2020
Public 2Y	9,898	96.7%	2.67	17.0	80.5%	2.85	28.0	65.7%
Black / African-American	673	95.8%	2.15	9.0	71.5%	2.29	17.1	53.2%
White	6,475	96.1%	2.79	18.6	81.0%	2.96	29.7	67.7%
Hispanic	636	97.6%	2.48	15.9	81.0%	2.71	26.9	64.0%
Asian / Pacific Islander	143	97.9%	2.85	17.0	88.8%	2.94	24.9	79.0%
Other / Unknown	1,971	98.6%	2.47	14.9	81.3%	2.70	26.2	62.8%
Public 4Y	10,949	98.9%	3.10	25.2	92.6%	3.21	38.8	86.8%
Black / African-American	949	98.4%	2.60	16.5	88.0%	2.73	28.1	76.5%
White	8,425	98.9%	3.17	26.5	93.3%	3.27	40.2	88.3%
Hispanic	533	98.9%	3.00	22.5	91.7%	3.13	36.4	85.0%
Asian / Pacific Islander	338	98.8%	3.29	27.9	96.2%	3.41	42.7	93.2%
Other / Unknown	704	99.3%	2.96	22.8	89.4%	3.14	36.1	81.8%

Source: Enhanced Missouri Achievement Study (EMSAS)

Degree Completion

Table 7: Recent Missouri Public High School Graduate Six-Year Completion Rate by Gender and Race/Ethnicity; Fall 2014 through Spring 2020

	Students	Total Completions	% Completed Associate	% Completed at Least Bachelor's	% Completed Graduate / Professional
Female	12,434	54.5%	18.9%	40.4%	2.8%
Black / African-American	1,246	35%	9%	28%	1%
White	9,366	58.0%	19.2%	43.8%	3.2%
Hispanic	344	44.2%	20.1%	30.8%	1.5%
Asian / Pacific Islander	271	66.8%	14.0%	55.7%	4.8%
Other / Unknown	1,207	47.3%	27.1%	26.2%	1.6%
Male	10,147	49.1%	17.2%	36.3%	2.2%
Black / African-American	821	26.8%	6.5%	21.8%	0.5%
White	7,837	52.7%	17.8%	39.3%	2.4%
Hispanic	277	42.2%	23.8%	23.8%	1.4%
Asian / Pacific Islander	266	53.8%	12.8%	45.9%	3.8%
Other / Unknown	946	40.1%	20.5%	24.9%	1.9%
Total	22,590	52.1%	18.1%	38.5%	2.5%
Black / African-American	2,067	31.9%	8.0%	25.4%	0.6%
White	17,208	55.6%	18.6%	41.7%	2.9%
Hispanic	621	43.3%	21.7%	27.7%	1.4%
Asian / Pacific Islander	537	60.3%	13.4%	50.8%	4.3%
Other / Unknown	2,157	44.1%	24.2%	25.6%	1.7%

Source: Enhanced Missouri Student Achievement Study (EMSAS)

**Table 8: Recent Missouri Public High School Graduate Six-Year Completion Rate
by Institutional Admissions Selectivity; Fall 2014 through Spring 2020**

	Students	Total Completions	% Completed Associate	% Completed at Least Bachelor's	% Completed Graduate / Professional
Highly Selective	799	80.5%	3.1%	78.5%	11.6%
Selective	6,911	70.3%	3.1%	67.8%	5.0%
Moderately Selective	3,324	56.4%	5.7%	52.9%	2.3%
Open	11,556	38.0%	31.7%	14.2%	0.5%

Source: Enhanced Missouri Student Achievement Study (EMSAS)